

ANTINTRUSION



ELKRON. THE HI-PROTECTION COMPANY

ELKRON

OUTDOOR PROTECTION

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OUTDOOR PROTECTIONS

INFRARED BARRIER

OUTDOOR PROTECTION

Elkron proposes high technological solutions for anti-intrusion protection in particular area, for instance isolated cottages, factory external, military zones, airports and other high risk zones. The technologies differ from active infrared and microwave.

Infrared indoor barriers and outdoor ones are constituted of infrared rays that create an ideal barrier that surrounds the protected zone. The alarm is enabled when the interruption of this invisible net occurs and range, differently according to the model it can reach 600 meters for the internal and up to 250 meters for the external. Some models are endowed with a system that eliminates false alarm caused by atmospheric agents, such as rain, snow or fog.

Microwave barrier fulfils an invisible protection phase with a 3-4meters diameter, generated between transmitter and receiver, that allows to obtain protection around the protected zone. It is an elevated technology that can reach 180 meters capacity each time and it is ideal for high risk situations.

INFRARED BARRIERS

EL20 infrared barrier

New active infrared barrier, strong, safe, reliable and easy to install. Thanks to its compact size (25x23 mm) it discreetly adapts to suit the most varied needs (for example it can be installed between window and blinds or roller shade)

TSMD technology with microprocessor based management

The barrier may be installed both indoors and outdoor thanks to its polycarbonate structure, with its high mechanical strenght and resistance to atmosheric agents (to a degree of IP65)

Special details enable compensation for expansion due to temperature changes

EASY TO INSTALL: as well as coming complete with a pre-wired cable, no special alignment procedures are required. The synchronisation of the rays is obtained automatically by way of an optic signal (without synchronism wire)

POSSIBLE INSTALLATION OF SEVERAL consecutive or parallel barriers thanks to automatic encoding of coupling the first time the device is switched on

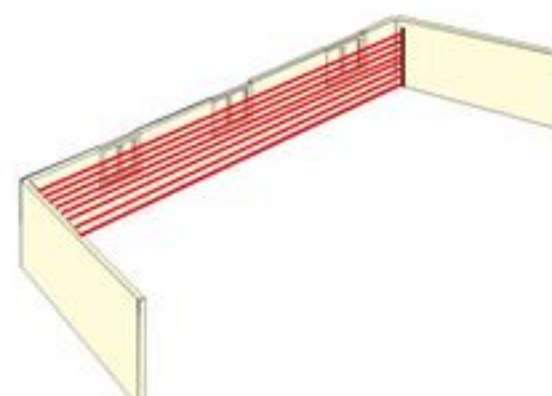
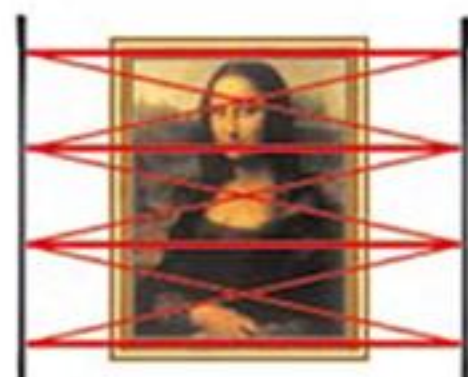
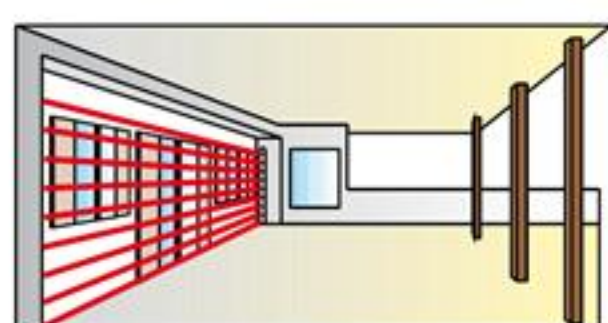
EQUIPPED WITH ANTI-REMOVAL AND ANTI-OPENING DEVICE on both ends

Alarm Memory

3 different operating models: point-point beams, adjacent beams and crossed beams

4 models for protection requirements of all dimensions. Range from 40 cm to 10 m for outdoor use and from 40 cm to 20 m for indoor use

Range: from 40 cm to 10 m for outdoor and from 40 cm to 20 m for indoor



Examples of some applications

OUTDOOR PROTECTIONS

INFRARED BARRIER

EL20 Infrared barrier

EL20RT/05 cod. EL1000211

Indoor / outdoor barrier

- Columns height: 0,5 m.
- 2 beams.
- Outdoor range adjustable from 40 cm to 10 m.
- Max indoor range 20 m.
- Nominal power voltage TX-TX: 12 Vdc
- Operating voltage min/max RX-TX: 5 - 15 Vdc.
- Intervention time management: 0.1 s (for 2 contiguous beams interruption).
- Signal characteristics: PM transmission (Pulse mode).
- Alarm relay contact: 0,1 A@24 Vdc.
- Antiremoval / antitamper: 50 mA@12 Vdc.
- Manufacturer's declared degree of protection: IP65 IK04.
- Certified degree of protection (CEI 70.1): IP34.
- Fault indication: Optic, through red led
- Certified operating temperature (CEI 79.2): -25°C - +55°C.
- Dimensions: 540 x 25 x 23 mm.
- Weight: 250 g.
- Amp certification.



EL20RT/05



EL20RT/10 cod. EL1100211

Same as EL20RT/05 but with:

- Column height: 1 m.
- 4 beams
- Dimensions: 1030 x 25 x 23 mm.
- Weight: 500 g.



EL20RT/10



EL20RT/15 cod. EL1200211

Same as EL20RT/05 but with:

- Column height: 1,5 m.
- 6 beams
- Dimensions: 1520 x 25 x 23 mm.
- Weight: 750 g.



EL20RT/15



EL20RT/20 cod. EL1300211

Same as EL20RT/05 but with:

- Column height: 2 m.
- 6 beams
- Dimensions: 2020 x 25 x 23 mm.
- Weight: 1000 g.



EL20RT/20



OUTDOOR PROTECTIONS

INFRARED BARRIERS

EL15 Infrared barriers

New generation outdoor security systems; a special technology eliminates all disturbances and false couplings caused by interferences between adjacent barriers. This is done by an additional circuit known as "synchronizer" designed to synchronize and couple the barriers.

Therefore each transmitter is coded and paired with its receiver and cannot interfere with other receiver. 15 different codes are possible for each barrier cell (set by rotary switch), therefore it is possible to install up to a maximum of 15 barriers without interference even if they are very near to one another.

When installing in cold areas, it is advisable to use heating circuit RS10 (optional); provisions have been made for the insertion of this circuit into the transmitter and the receiver through the appropriate connection.

The EL10 barrier is immune to the environmental disturbances caused by the sun or by other infra-red reflections. Furthermore, the device features a circuit for the disqualification (exclusion) of the alarm which, in the case of heavy fog, snow or downpours, blocks the alarms relay into a "rest" position and provides an electrical signal at the terminal board. The disqualification circuit resets the systems automatically when the above-mentioned condition has ceased.

EL15R/T cod. ELO400111

Outdoor barrier

- Range 100 m.
- Max width: 2,5 m.
- Receiver sensitivity adjustment for range up to 30 m.
- Photo transmitter element made by Gallium Arsenide Diode
- Fresnel lens optics technology.
- SMD circuit technology.
- Impulse coding device. With this module it is possible to install up to 15 transmitters/receivers in the same barrier.
- High degree of sensitivity.
- Receiver lock control (TC).
- Test led.
- Adjustment of "beam" interruption time.
- Equipped with anti-tamper device and built-in disqualification circuit.
- Rated voltage: 10,5 ÷ 14 Vdc.
- Transmitter consumption: 10 mA nominal.
- Receiver consumption: 15 mA at rest - 27 mA in alarm.
- Dimensions (H x W x D): 62 x 60 x 150 mm.

EL15/S cod. ELO360115

Synchronism module for EL15RT.



EL10R/T



OUTDOOR PROTECTIONS

INFRARED BARRIER

EL10 infrared barrier

The infrared modulated light barrier EL10 is ideal for external perimeter protection of industrial plants, villas or gardens, thanks to the characteristics of the electronic circuit, the relative paintwork and the shape of the aluminium columns which provide support as well as hiding the position of the sensor.

The sensors are provided with a MAKROLON container (made waterproof by a rubber washer) which also allows the external installation of an individual device so as to provide detector systems even at access points (security commands, opening/closing of doors, gates, etc.). When installing in cold areas, it is advisable to use heating circuit RS10 (optional); provisions have been made for the insertion of this circuit into the transmitter and the receiver through the appropriate connection.

The EL10 barrier is immune to the environmental disturbances caused by the sun or by other infra-red reflections. Furthermore, the device features a circuit for the disqualification (exclusion) of the alarm which, in the case of heavy fog, snow or downpours, blocks the alarms relay into a "rest" position and provides an electrical signal at the terminal board. The disqualification circuit resets the systems automatically when the above-mentioned condition has ceased.

EL10R/T cod. ELO800111

Outdoor barrier

- Range 100m.
- Receiver sensitivity adjustment for range up to 30 m.
- Fresnel lens optics technology.
- SMD circuit technology.
- High degree of sensitivity.
- Receiver lock control (TC).
- Test led.
- Adjustment of "beam" interruption time.
- Equipped with anti-tamper device and built-in disqualification circuit.
- Rated voltage: 10,5 ÷ 14 Vdc.
- Transmitter consumption: 30 mA nominal.
- Receiver consumption: 15 mA at rest - 27 mA in alarm.
- Dimensions (H x W x D): 62 x 60 x 150 mm.

Accessories for barrier EL10 and EL15RT

GA01 cod. KT1500111

Alignment kit.

RS10 cod. ELO200115

Heating resistance for EL10/EL20.

RS10/T cod. ELO600115

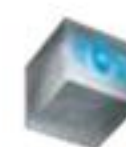
Thermostat for RS10.

KIT COPERCHIO cod. ELO910111

Cover kit for EL barriers .



EL15R/T



OUTDOOR PROTECTIONS

INFRARED BARRIERS

Accessories for barriers EL10 and EL15RT

SP13/15 cod. SP1200111
Supporting pole for columns SP11/15 and 20. Height 1,5 m..

SP13/20 cod. SP1300111
Supporting pole for columns SP11/25 and 30. Height 3 m.

SP11/15 cod. SP1100113
Anodized aluminium column for EL10 and EL15 barriers height 1,5 m

SP11/20 cod. SP1200113
Same as SP11/15 height 2 m

SP11/25 cod. SP1300113
Same as SP11/15 height 2,5 m

SP11/30 cod. SP1400113
Same as SP11/15 height 3 m

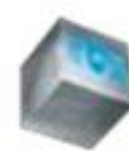
SP11M cod. SP1600161
Kit with microcontact on bracket for SP11

KIT x SP11/15 cod. KT1320161
Additional kit including: 1 upper cover for SP11 column, 1 lower cover for SP11, 1 cable guiding connector, 2 packs of gaskets, bolts and screws

KIT x SP11/20 cod. KT1420161
Additional kit including: 1 upper cover for SP11 column, 1 lower cover for SP11, 1 cable guiding connector, 2 packs of gaskets, bolts and screws

KIT x SP11/25 cod. KT1520161
Additional kit including: 1 upper cover for SP11 column, 1 lower cover for SP11, 1 cable guiding connector, 2 packs of gaskets, bolts and screws

KIT x SP11/30 cod. KT1620161
Additional kit including: 1 upper cover for SP11 column, 1 lower cover for SP11, 1 cable guiding connector, 2 packs of gaskets, bolts and screws



OUTDOOR PROTECTIONS

EL50 INFRARED BARRIER

EL50 infrared barrier

EL50 R/T range is a set of active infrared ray barriers which is ideal to be used for perimetral protections of external and internal areas, for large areas too. EL50 R/T range is made up of a barrier having 60 m max external range and 1 IR double ray, of a barrier having 150 m max external range and 1 IR double ray, and of a barrier having 250 m max external range and 2 double rays. Barriers are operating on 4 different frequencies selectable with dip switches, provided with high quality aspheric lenses and box having seals which make them suitable to outdoor post installations too (provided brackets).



EL50RT2PH-60 cod. EL1400113

Indoor / outdoor barrier

- 120 m internal area nominal range, 60 m external area nominal range
- 1 IR double ray
- Transmission selectable on 4 different frequencies
- Optical synchronisation
- Gain automatic control (AGC)
- High precision aspheric lenses
- View finder for optical alignment with micrometric regulation
- 0° to 180° ray regulation
- Ray interruption time regulation
- Independent use or use in SP50 column
- Power supply: 10,5 - 30 Vdc.
- Absorption: 85 mA max.
- Relais intervention time: from 50 to 700 ms.
- Output relais: 1 alarm NO/NC - 0.2A - 28 Vdc
1 tamper NO/NC - 0.2A - 28 Vdc
- Adjustment angle: Horizontal 0°-180° - vertical +/- 10°.
- Protection degree: IP55.
- Operating temperature: -25°C/+55°C.
- Dimensions and weight: 76 x 181,5 x 77,8 mm - 924 gr. (TX e RX)



EL50RT2PH-60

EL50RT2PH-150 cod. EL1500113

Same as EL50RTPH-60 but with:

- 300 m internal area nominal range, 150 m external area nominal range.
- Dimensions and weight: 100 x 247 x 100 mm - 1826 gr. (TX e RX)



EL50RT2PH-150

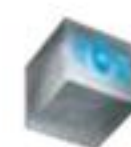
EL50RT2PH-250 cod. EL1600113

Same as EL50RTPH-60 but with:

- 500 m internal area nominal range, 250 m external area nominal range
- 2 IR double rays.
- Detection mode: 4 rays interruption.
- Disqualification output
- Absorption: 97 mA max.
- Output Relais: 1 alarm NO/NC - 0.2A - 28 Vdc
1 disqualification NO/NC - 0.2A - 28 Vdc
1 tamper NO/NC - 0.2A - 28 Vdc
- Dimensions and weight: 100 x 390 x 100 mm - 1440 gr (TX e RX)



EL50RT2PH-250



OUTDOOR PROTECTIONS

EL50 INFRARED BARRIER

Accessories for EL50 infrared barriers

SP50/15 cod. KT2B00163

Column for barrier EL50 height 1,5 m

- Modular SP50 column, for infrared perimetral barriers, is made up of sections made of black anodised aluminium and covering made of polycarbonate, and is available with 1 to 4 m lengths. By using special accessories, the column can be installed with wall fastening, with floor fastening and with underground fastening base.

SP50/20 cod. KT3B00163

Same as SP50/15 height 2 m.

SP50/25 cod. KT4B00163

Same as SP50/15 height 2,5 m.

SP50/30 cod. KT5B00163

Same as SP50/15 height 3 m.

KIT SP50 cod. KT8B10163

Brackets for fastening the column to wall

KIT 2xPH-60 cod. KT9B10163

Fastening bracket for 2PH60m barrier

RS50T cod. EL1710163

Thermostat-providing apparatus for SP50

ZA X SP50 cod. SP8910163

Cramp to be cemented on the ground

BASE SP50/30 cod. SP8810163

Base for fastening the column to floor (SP50 over 2m)

BASE SP50/20 cod. SP8710163

Base for fastening the column to floor (SP50 up to 2m)

PS/SP50 cod. PS6810163

Battery charger power supply for the column



SP50 + BASE



SP50



OUTDOOR PROTECTIONS

MICROWAVE BARRIERS

MICROWAVE BARRIERS

MWA60R/T Microwave Barrier

MWA60 is an active micro wave barrier with 60m maximum range, designed for external and internal surface protection. The system is made up of two units. Equipment is only built with solid state devices and finished with tropicalising resin in order that excellent weather-tightness is enabled.

Protection lobe

Radiation field shape is quite well defined. Therefore, this shape enables higher detection probability with minimum number of undesired alarms. Transmitter includes planar micro wave emitting a highly steady low power narrow and directive beam.

Selectable channels

Transmitter and receiver can be tuned in frequency through dip switches enabling to code 5 different channels. In this way, interference is prevented in the case of simultaneous installations of more pairs of barriers

Selective filter

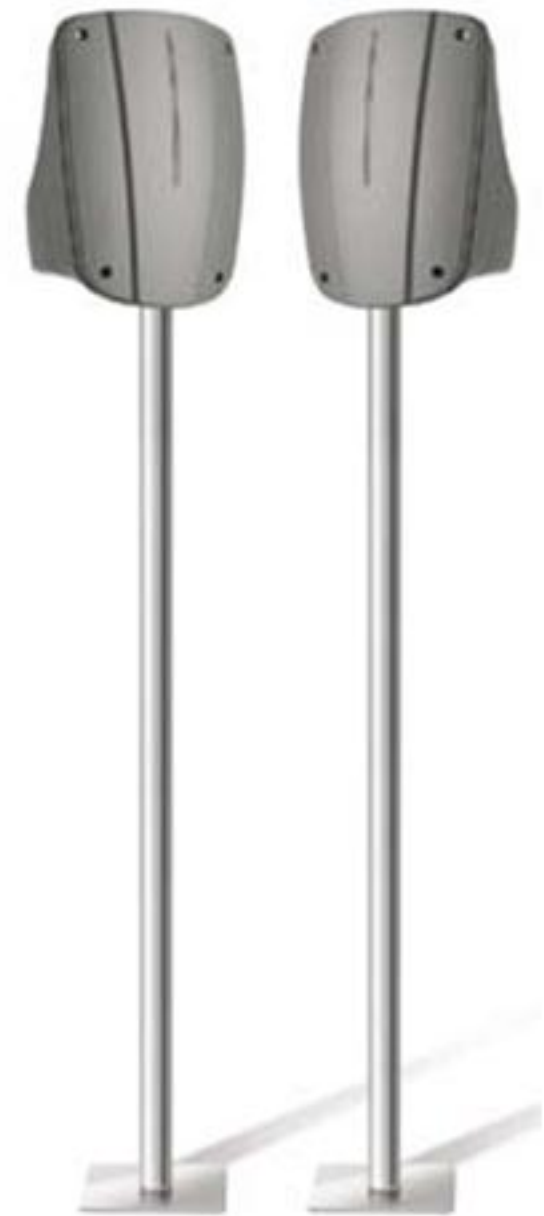
Each receiver is provided with a particular selective filter which only chooses the frequency of its own channel and rejects the other frequencies, so preventing the barrier from being bypassed should a false Transmitter be used.

Automatic compensation

Receiver is provided with an output which is started in case of insufficient signal. This is made to prevent and signal misalignment produced either when the system is off or owing to obstacles put within barriers operating beam.

Disqualification signalling

Receiver is provided with an output which is started in case of insufficient signal. This is made to prevent and signal misalignment produced either when the system is off or owing to obstacles put within barriers operating beam.



OUTDOOR PROTECTIONS

MICROWAVE BARRIER

MWA Microwave barrier

MWA60R/T cod. MW5500111

Outdoor microwave barrier

- Range: 60m
- Nominal voltage: 12Vdc
- Min/max voltage: 11.5 - 15Vdc
- Absorption at rest: TX 31mA, RX 70mA
- Absorption in alarm condition: TX 31mA, RX 70mA
- Transmission frequency: 10.525 GHz (+/- 20MHz)
- Alarm relay block : signal on dedicated input
- Alarm relay: N.C. 500mA 12V
- Tampering protection : anti-opening switch (anti-disorientation kit available)
- Disqualification signalling: electrical output
- Modulation: 5 selectable channels
- Radiated power : 25 peak mW
- Operating temperature: -20 + 55 C° (heating kit available)
- Protection grade: IP 34
- Dimensioni (l x h x p): 176 x 230 x 133 mm.



MW60R/T

MWA120R/T cod. MW5600111

Same as MW60R/T but with range 120 m

MW30R/T microwave barrier

MW30R/T cod. MW1900111

Outdoor microwave barrier

- Range: 180 m (program. 15 ÷ 100 m, 100 ÷ 180 m)
- Beam width: 6 m adjustable
- Four modulating channels
- Supply: 12 Vdc or 18 Vca
- Battery space: 12 Vdc - 1,9 Ah
- Frequency: in accordance with national frequencies
- Supply: 10,5 ÷ 14 Vdc, 16 ÷ 18 Vca
- Consumption: 85 mA (TX), 35 mA (RX)
- Beam width adjustments
- Automatic Gain Control (AGC)
- Intervention time adjustment
- Possibility of alternating current supply
- Anti-intruder tamper
- Setting and control test points
- Internal warning led for visualization during installation
- Dimensions (H x W x D) : 250 x 250 x 130 mm



MW30R/T



OUTDOOR PROTECTIONS

MICROWAVE BARRIER

Fixing systems for MWA microwave barriers

SP20/MWA cod. SP9410113

Brackets for fastening the barrier to wall.

- Length 150 mm.

SP50/MWA cod. SP9510113

Brackets for fastening the barrier to wall.

- Length 580 mm.

SP120/MWA cod. SP9610113

Floor pole for MWA barrier

- Length 1200 cm.

SP130/MWA cod. SP9710113

Underground post for barrier MWA60

- Length 1200 cm.

Accessories for MWA microwave barrier

RS/MWA cod. MW5810113

Kit thermostat and heating.

KIT AMP/MWA cod. KT1C10113

Kit anti-removal/anti-disorientation kit

Accessories for MW30 microwave barrier

SP10/15 cod. SP1000111

Galvanized pole for MW30RT. Height 1,5 m.

SP10/20 cod. SP1100111

Galvanized pole for MW30RT. Height 2 m.

RT35 cod. RT0200171

Test meter for MW30RT alignment.



SP120/MWA



SP20/MWA

